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| APPLICATION NO. | F | TLING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|------------------------------------|------------|----------------------|------------------------|------------------|
| 10/617,419 | | 07/10/2003 | Tadafumi Shimizu | 35874 | 4019 |
| 116 | 7590 | 08/10/2004 | | EXAMINER | |
| PEARNE | | - | NGO, HOANG X | | |
| | 1801 EAST 9TH STREET SUITE 1200 | | | | PAPER NUMBER |
| CLEVELA | CLEVELAND, OH 44114-3108 | | | | |
| | | | | DATE MAILED: 08/10/200 | 4 |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | | | | |
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| Office Action Summary | 10/617,419 | SHIMIZU ET AL. | | | | |
| Onice Action Summary | Examiner | Art Unit | | | | |
| | Hoang Ngo | 2852 | | | | |
| The MAILING DATE of this communication apperiod for Reply | pears on the cover sheet with the c | orrespondence address | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a repilif NO period for reply is specified above, the maximum statutory period. - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailine earned patent term adjustment. See 37 CFR 1.704(b). | 136(a). In no event, however, may a reply be timely within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDONE | nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133). | | | | |
| Status | • | | | | | |
| 1) Responsive to communication(s) filed on | | | | | | |
| | — s action is non-final. | | | | | |
| 3) Since this application is in condition for allowa | | | | | | |
| Disposition of Claims | | | | | | |
| 4) ☐ Claim(s) 1-25 is/are pending in the application 4a) Of the above claim(s) is/are withdra 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-25 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or | wn from consideration. | | | | | |
| Application Papers | | | | | | |
| 9)☐ The specification is objected to by the Examine | er. | | | | | |
| 10)☐ The drawing(s) filed on is/are: a)☐ acc | cepted or b) objected to by the I | Examiner. | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | |
| Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex | | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Bureat * See the attached detailed Office action for a list | ts have been received. ts have been received in Applicati prity documents have been receive nu (PCT Rule 17.2(a)). | on No ed in this National Stage | | | | |
| Attachment(s) | | | | | | |
| Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) | 4) 🔲 Interview Summary Paper No(s)/Mail Da | | | | | |
| Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 7/10/03 & 1/21/04. | | Patent Application (PTO-152) | | | | |

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DETAILED ACTION

Claim Objections

1. Claim 3 is objected to because of the following informalities:

Claim 3, line 2, the term "coire cores" should be changed to - -coil coreto correct typo error. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35
 U.S.C. 102 that form the basis for the rejections under this section made in this
 Office action:

A person shall be entitled to a patent unless -

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- 3. Claims 1-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Applicant's cited prior art (Japan Pat. No. 2000-206813).

The prior art discloses a fixing device for an image forming apparatus comprising a heat roller 10 using eddy current; an induction heating element (L1, L2, L3, abstract) for generating the eddy current on the heat roller being disposed along the heat roller and facing a part of the heat roller (Fig. 5); a plurality of coil cores (1e, 2e, 3e, abstract) provided outside the induction heating element and being arranged at an interval in a longitudinal direction of the induction heating element such that a longitudinal direction of one of the plurality of coil cores forms a predetermined angle with the longitudinal direction of the induction heating element (Fig. 6).

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The prior art of record further discloses the predetermined angle is an acute angle (i.e. an angle of about 90 degrees formed between 1e and 1ia); the plurality of coil cores are arranged at two different intervals in the longitudinal direction (Fig. 5); the predetermined angle are arranged such that heat distribution of the heat roller is approximately uniform (i.e. uniform shown in Fig. 4) and the intervals become smaller as each of the coil cores is placed farther from a center of the induction heating element; an interval at an end portion of the heat induction heating element is smaller than that of a center portion; a central core provided along a longitudinal direction of the induction heating element (see heat distribution between L1, L2, and L3, Fig. 4); the coil cores are C-shaped coil cores (Fig. 5).

4. Claims 24 and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Applicant's cited prior art (U.S. Pat. No. 6,078,781).

The prior art discloses a fixing device comprising a heat generating member 202 having a rotating body made of a magnetic metal member (Fig. 5); an inductive heating unit having a magnetizing coil 211 opposed to the outer peripheral surface of the heat generating member and having a bundle of wires 111 with surfaces insulated drawn in the direction of a rotation axis of the heat generating member and wound along the direction of the circumference of the heat generating member (Fig. 1) and generating heat by electromagnetic induction (Col. 7, line 61); wherein the magnetizing coil having a length longer than the length of the heat generating member (Col. 31, lines 26-33). The prior art further discloses a fixing roller forms the fixing nip part (Fig. 15).

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoang Ngo whose telephone number is (571) 272-2138. The examiner can normally be reached on 6:00am - 2:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Arthur Grimley can be reached on (571) 272-2136. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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